4.10 RELATIONSHIP BETWEEN SHORT-TERM USES OF ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The use of land on any of the six candidate DOE sites being considered for storage and disposition facilities (Hanford, NTS, INEL, Pantex, ORR, and SRS) would enhance the long-term productivity on each site. In light of current reductions in the nuclear weapons stockpile, the lack of new weapons development or production, the moratorium on nuclear testing, and concerns about safety and reliability in the aging stockpile, DOE's Preferred Alternative is to, over time, phase out the RFETS existing storage facility, upgrade the Pantex, ORR, and SRS storage facilities for Pu and HEU storage, and to continue to use existing facilities at Hanford, INEL, and LANL. The reduction of Pu stockpile meets the U.S. nonproliferation policy. In addition, DOE proposes to modify existing or build new disposition facilities that will enhance the long-term use of the selected sites. The Preferred Alternative for disposition is a combination of using pit disassembly/conversion, Pu conversion, MOX fuel fabrication, and immobilization facilities.

Most storage and disposition alternatives would require the use of additional land. Such usage would remove this land from other beneficial uses. Disposal of solid nonhazardous waste generated from facilities construction and operations would require additional land at onsite sanitary landfills. Solid nonhazardous waste generated from these facilities would continuously require additional land at a sanitary landfill site that would be unavailable for other uses in the long term. LLW would require additional space for onsite storage and waste processing and would involve the commitment of associated land, transportation, processing facilities, and other disposal resources. Creation of land disposal facilities allows the site to be productive for the long-term by protecting the overall environment and complying with Federal and State environmental requirements.

Losses of terrestrial and aquatic species and habitats from natural productivity to accommodate new facilities and temporary disturbances required during construction are possible. Land clearing and construction activities resulting in large numbers of personnel and equipment moving about an area would disperse wildlife and temporarily eliminate habitats. Although some destruction would be inevitable during and after construction, these losses would be minimized by careful site selection, including environmental reviews at the site-specific level. In addition, short-term disturbances of previously undisturbed biological habitats from the construction of new facilities could cause long-term reductions in the biological productivity of an area. These long-term effects could occur, for example, at facilities located in arid areas of the western United States such as Hanford, NTS, and INEL, where biological communities recover very slowly from disturbances. Threatened and endangered species would have minimal impacts from the Preferred Alternative.[5]

[5] The range of the threatened desert tortoise lies in the southern third of NTS. Construction and operation of new facilities associated with the storage and disposition facilities have the potential to impact the federally listed threatened desert tortoise. Measures designed to avoid impacts to the desert tortoise from previous projects at NTS have been implemented with mitigation measures developed in consultation with USFWS.